



**Sonoma County Community Development Commission
Housing Authority • Redevelopment Agency
1440 Guerneville Road, Santa Rosa, CA 95403-4107**

MONTE RIO WASTEWATER TASK GROUP

Meeting Notes

**December 21, 2009, 6:30 pm
Monte Rio Community Center**

Introduction

Task Group members present: Dan Fein, Ken Wikle, Gary Getchell, Chuck Burger, Rich Holmer, Steve Mack, Lee Torr IV, Rene DeMonchy, Doreen Atkinson, Preston Smith.

Task Group members absent: Jim Quigley, Suzie Baxman, Efren Carrillo.

Staff Present: Kathleen Kane, Jane James.

Public Present: Brenda Adelman, Wanda Holmer, Mike Crilly, Rue Furch, Dennis O'Leary, Trini Amador, Linda Homen, Denise Soza.

Review and approve prior meeting notes

Notes of 11/23/09 meeting were accepted as written with addition of Jane James listed as staff present.

Presentation – How Septic Systems Work

Rene DeMonchy introduced Rich Holmer as a local expert in septic systems, with history as previous head of County Well and Septic Division of PRMD. Rich presented overview of characteristics of sewage, components of septic systems, how septic systems work, septic system failure, maintenance and repair of septic systems, and alternative on-site sewage disposal systems (presentation outline attached).

U.S. EPA website has link to order free manuals (2-book pair) about on-site sewage disposal systems that are a very good, easily understood references.

Rich responded to several questions from Task Group members and members of the public.

Discussion of study groups

Study group progress reports

Historical background – February 22, 2010

Other communities – March 15, 2010

Technical possibilities – April 19, 2010

Plan for next meeting and closing

Next meeting will be a presentation on regulatory requirements, with representatives of regulatory agencies expected to attend, on January 11, 2010.

Adjourn

Very good presentation by Rich. Good level of information complexity. Desire for more graphics.

HOW SEPTIC SYSTEMS WORK
Outline of Presentation for Monte Rio Wastewater Task Group

- I. Characteristics of sewage
 - A. Types of household wastewater
 - B. Terms used to describe wastewater
 - C. Health issues

- II. Septic systems
 - A. Components of a standard septic system
 - B. Treatment of wastewater in a septic system
 - i. How are various sewage components removed?
 1. Soil as a sieve
 2. Microbial retention in soil
 3. Vertical and horizontal separation to critical discharge points
 - ii. Contamination by extraneous chemicals
 - C. Soils and how they affect septic system function
 - i. Types of soils
 - ii. How soil type affects septic system function
 - iii. Limiting conditions such as rock, impermeable layers, cut banks
 - iv. Percolation tests
 - D. Septic system failure
 - i. What is failure?
 - ii. Factors affecting failure
 1. Poor soils
 2. Small lots/inadequate system size
 3. High groundwater
 4. Inadequate separation to critical discharge points (streams, wells, drainage courses)
 5. Flooding issues
 - iii. Degradation of groundwater by septic systems
 - iv. Cumulative effects of septic systems
 1. Nitrates
 2. Groundwater mounding
 - E. Maintenance of septic systems
 - i. Septic tank maintenance
 - ii. Leachfield maintenance and abuse
 - iii. Factors affecting longevity of a septic system
 - F. Repair of septic systems
 - i. Code issues
 - ii. Practical limitations

- III. Alternative on-site sewage disposal systems

- A. Aerobic systems
 - B. Filtration systems
 - i. Sand filters
 - ii. Fabric filters
 - iii. Peat filters
 - C. Alternative dispersal systems
 - i. Drip systems
 - ii. Mound systems
 - iii. Pressure distribution
 - iv. At grade systems
 - v. Infiltrators
 - vi. Seepage pits
 - D. Gray water systems
- IV. Conclusion and questions